Innovation and gender

– how to boost and measure change

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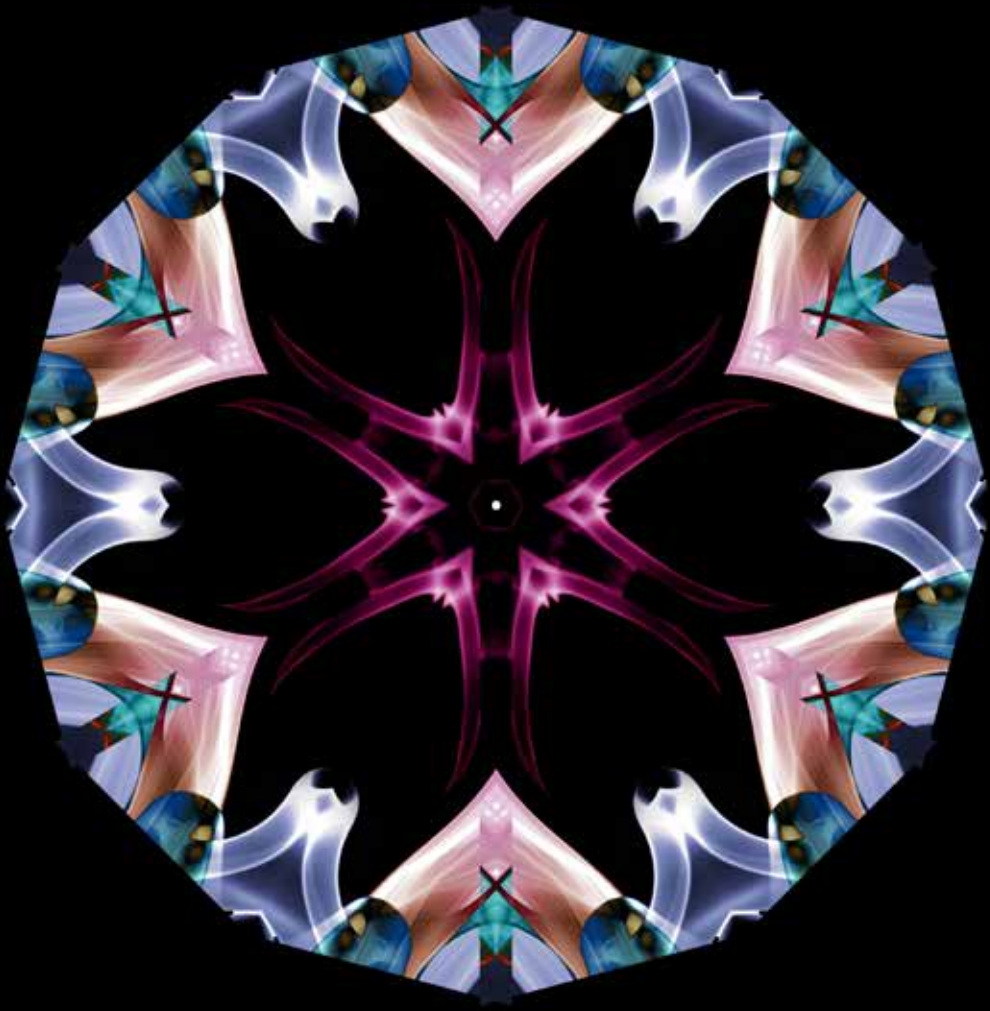


INTRODUCTION

A gender-segregated labour market and a segregated ICT sector have consequences. It is a big risk that the pattern is maintained over time, more or less consciously.

Gender science is seen as leverage to innovation in making new knowledge visible and useful for achieving for example a broader recruitment base and consciousness about how competence and career possibilities are gendered.

When a gender science platform is combined with collaborative processes and participatory methods there is an increased possibility for a more sustainable change.

The doing gender perspective links the daily doing of gender and interacts with the institutional level, as well as making social power relations visible. The focus on action makes it well suited to combine with an interactive research theory and methodology.

Labour markets are heavily segregated by gender in both Finland and Sweden. Even Information and Communication Technology (ICT) sector that is a relatively new trade is heavily segregated as male dominated. In the scope of the Mäta Jämt project a survey of women workers in the ICT sector in northern Finland and Sweden has been carried out. Results show that in northern Sweden 20% and in northern Finland 41% of workers in ICT sector are women. In Finland segregation is deeper: women work more in supportive occupations such as secretaries, clerks and assemblers, not in engineering or design.

Globalized markets have created pressure for actions, which could maintain and even increase competitiveness on a national level. European countries have struggled with economy, losing jobs and industries to low-wage countries, high taxes and salaries as well as increasing unemployment. Throughout the European Union the focus is now on high competence jobs, such as design, research and development. Recently a gender aspect has also been raised in the EU agenda:

- Women have unused potential of talents for labor markets.
- Northern and peripheral areas have an extra challenge in how to stop young women's migration to south.

A gender-segregated labour market and a segregated ICT sector have consequences. It is a big risk that the pattern is maintained over time, more or less consciously. Recruitment in segregated organizations tend to continue to recruit people from the already dominant sex. It is a challenge to break the pattern. Therefore, knowledge, awareness and support of the organization's management are important factors when trying to change attitudes and the culture and structure of the organization.

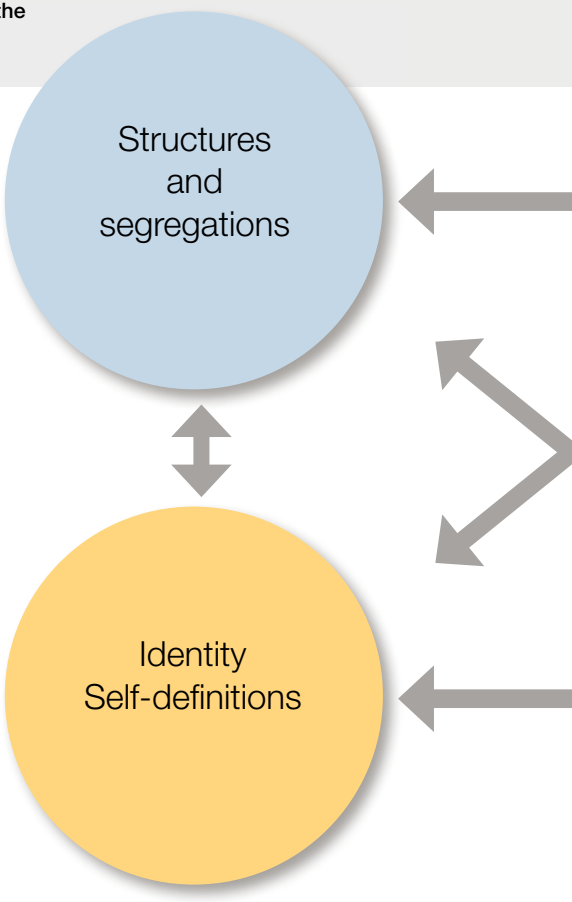
Mono-cultural workplaces are lacking natural creativeness compared to workplaces with diversity. Variations in gender, ethnicity, age, worldviews (spiritual or ideological), sexual orientation, socioeconomic status, professional backgrounds etc., increase innovative buzz and thus improve products and services.

How can one improve the development process of products and services in the ICT sector through gender equality and diversity? Is it possible to integrate a gender perspective to the existing processes? The answers are not necessarily difficult to find once the gender glasses are in place.

How we describe a problem is closely connected to what kind of a solution we can see. It is common that the lack of women in ICT is explained by saying that there are no women who apply for the jobs. It is probably true, but there is a risk singling out women as the “problem” rather than asking how the ICT sector should act to make ICT as attractive for women as men.

TO BOOST AND MEASURE CHANGE

This is a model we have used as a platform in the process. The four corners are entries to where organizations are doing gender, but it also entries to where we can try to boost and measure change in a process or a project. The model reflects more aspects than counting people and making surveys. You will find the methods and our experiences in this handbook.

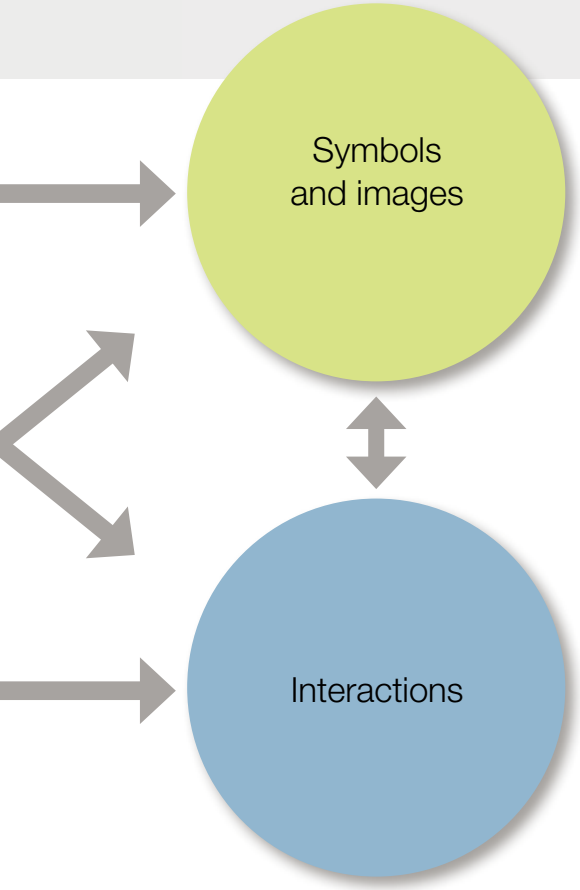


STRUCTURES

- Methods; surveys and statistics (quantitative), interviews, focus groups and observations (qualitative).
  Page 41, 43, 58, 62, 67
- Measure segregation by counting bodies.
  Page 65
- Illustrated by Personas.
  Page 30, 44, 45

IDENTITY

- Methods; gender observations and value exercise.
  Page 43, 48, 58
- Measure awareness and engagement at the starting point and the end of the project. Illustrated by personas Lars. Measure adjustment of behaviour.
  Page 30, 44, 45, 62, 67



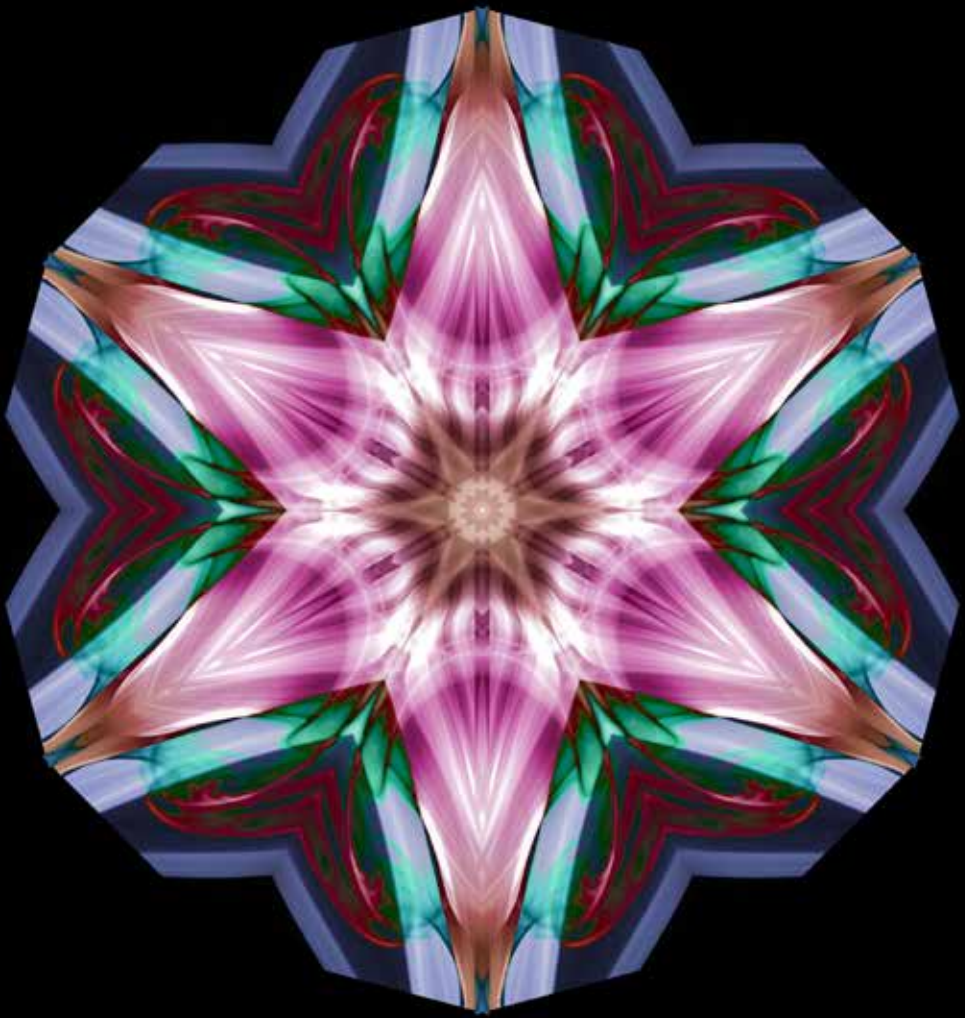
SYMBOLS

- Method; analyses of websites and magazines.
  Page 47
- Measuring representation in website and magazine.

INTERACTIONS

- Methods; gender observations and value exercise.
  Page 41, 43, 47, 48
- Illustrate and practise change with Forum play.
  Page 41

Acker (1999), Gunnarsson et al. (2007)



BACKGROUND

The overall objective of Interreg IVA North programme is to strengthen the competitiveness and solidarity within the programme area of northern Finland and northern Sweden. The programme aims to increase the number of new companies and/or to promote the growth of existing ones. Another goal is to establish new social networks and contacts through face-to-face meetings during program implementation.

The Mäta Jämt project

The aim of the Mäta Jämt project is to contribute to increased knowledge and mechanisms of innovation systems in the region, as well as enhance the knowledge of gender equality and diversity as drivers of innovation in general and in ICT in particular.

The main objective of the project is to develop a method to measure effects of gender equality and diversity activities in ICT and educational environments. Other objectives are to increase the gender awareness in the ICT sector (both academia and industry), to promote the learning processes in the ICT and educational sectors and establish a network of actors for a sustainable gender equality and diversity work at the universities and ICT companies.

The Mäta Jämt project which ends in 2013 is FUNDED BY:
Interreg IVA North, County Administrative Board of Norrbotten and Regional Council of Lapland.

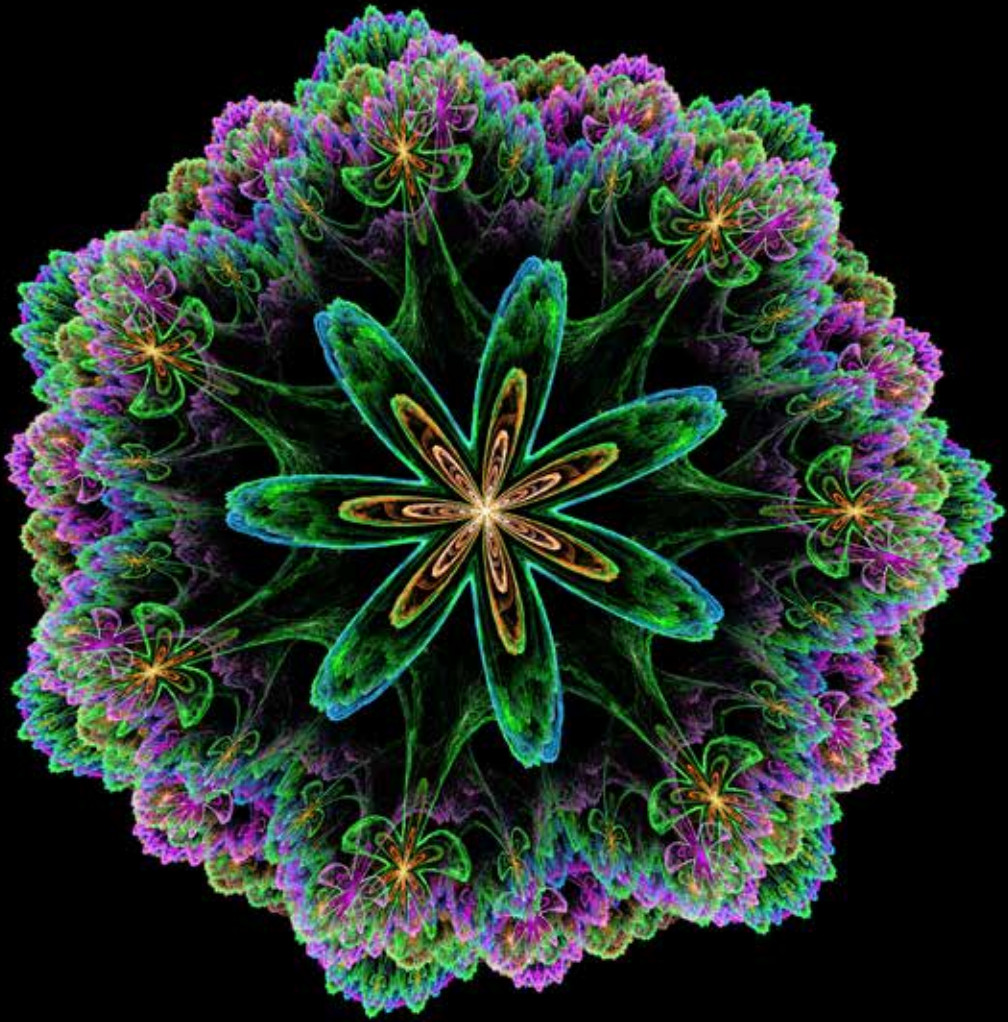
PROJECT PARTNERS:
Luleå University of Technology and Oulu University supported by Ritaharju Community Centre in Oulu and local SME's.

LEAD PARTNER:
Centre for Distance-spanning Technology at Luleå University of Technology.

The development of the tools and methods has mainly been carried out together with two of the pilots: Ritaharju Community Centre (RCC) in Oulu and the SATIN project at Centre for Distance-spanning Technology, Luleå University of Technology.

In Ritaharju a new operational model for the community centre was developed. The aim was to enforce the collaboration of staff, include gender equality and diversity awareness into all structures of RCC as well as the working culture of RCC. The development of the management model and competences were also included in the process. The majority of the work was done in collaboration with the management group of RCC.

The aim of the SATIN project was to empower people without previous programming skills to create apps and mobile services. In order to successfully involve a broader group of people to develop apps, the SATIN platform was developed to support inclusion, related to gender as well as diversity. How to challenge ingrained gender roles and avoid preserving stereotypes throughout the design process were frequent discussion topics when developing the SATIN platform.



GENDER PLATFORM

Overarching frame

To frame the activities done by the project participants, a theoretical and methodological cohesion perspective was developed. It is based on the merge between two different scientific fields, the “doing gender” stream in organizations and a collaborative research approach and methodology. The latter could be described as an interactive educational and learning approach applicable for more general organizational change and development projects as well as gender based mainstreaming projects. Gender mainstreaming projects that also have used a merge between gender traditions and collaborative research are for example described in; Berge and Ve (2000), Gunnarsson, Westberg, Andersson and Balkmar (2007), Hörte and Isaksson (2007), Gillberg et al. eds. (2010), Gunnarsson (2011), Lindholm, ed. (2011), Andersson et al. eds (2012), Andersson, Berglund, Gunnarsson and Sundin. Eds. (2012), Phillips, Kristiansen, Vehviläinen and Gunnarsson eds. (2012).

Collaborative processes and participatory methods are means to create more innovative organizational development- and change processes. They promote joint learning processes with an exchange of experiences and knowledge among the participants.

Gender science on the other hand is seen as leverage to innovation in making new knowledge visible and useful for achieving for example a broader recruitment base and consciousness about how competence and career possibilities are gendered.

When a gender science platform is combined with collaborative processes and participatory methods there is an increased possibility for a more sustainable change.

The above described frame and methodology can also be used when working with diversity mainstreaming projects.

Watch out for the gaps between theories and practice, saying and doing

Our combined approach has in various ways and in different project activities led to an understanding of how we all do gender and diversity in everyday life and also revealed that we can promote a change.

Participants, researchers and process leaders are, even though we strive for a change, influenced by strong structures and institutions in society that tell us what is “normal and natural”. Gender for example can be seen as a constitutive element in all organisational life both at work and when organizing our private life. There is what we call a “gender contract” that we as individuals and groups interact with. This contract shows variations in relation to culture, history, regional settings, business areas etc. A strategic process tool – Reflexive Gender Reminders, to be used in gender mainstreaming processes is developed by Gunnarsson (2006). The purpose of the tool is to link everyday organizational practice to structural and institutional frames in society. Frames that influence the possibilities and hindraces for the space of action in mainstreaming processes.

This means that change processes encounter various tailwinds and headwinds that have to be dealt with. This consensus and dissensus process can be seen as part of a dynamic process and as such has important potential for achieving a better base for actions to be taken.

You could also look at this change process played out in a space where structures, institutions, individuals and groups meet and negotiate the boundaries, content and directions for what is allowed to change and what is not. The boundaries of this space are flexible and depend on the local settings, the participants, the existing driving forces and activities done.

Sustainable process

We have chosen this strategic frame and base to promote a more sustainable change process. The change processes are more and more taken over and 'owned' by the organizations/companies. This to ensure that the change processes continue when the project is over and the process leaders and researchers have left. To achieve this a team of 'change agents' has to be formed initially. They have to be committed, given time, resources and legitimized by the top- and middle managers to be the core driving agents based in the everyday organizational life for the change- and development processes.

In the ideal situation all participants in interactive collaborative processes are seen as experts in their own fields. They collaborate on equal terms in the joint learning and knowledge sharing processes. This is done with the purpose of obtaining what some researchers call an increased robustness in knowledge production, i.e. achieving a more robust knowledge about reality. In such processes the participants learn from each other's experiences.

Watch out for the gap between saying and doing. One ideal prerequisite for a joint learning process requires that all participants are heard on equal terms. To facilitate this you could during meetings, workshops etc. appoint an observer among the participants that is giving you feedback on what happens under the workshop: who talks, for how long, the importance of different agenda issues etc. 'A gender and diversity guard'. The feedback from the observer is important to reflect upon in the group.

Watch out for the gap between saying and doing.

Four sets of competences

There are four sets of competences that are necessary for promoting a successful gender equality and diversity development and change process. You have to make sure that these four sets of competences in theory and practice are embedded in the change process:

- **An in-depth knowledge and experience from the organization/ company.**
- **The experienced competence of driving a development- and/or a change process.**
- **The knowledge and experiences of collaborative theory and methodology.**
- **The knowledge and experiences of gender science on a theoretical and practical level.**

These competences are necessary to have in the project and in the core driving team with insiders and outsiders.

To have competence as a point of departure is a better strategy than categorizing people by professions. Starting from the needed competence means that the teams and roles could be organized in various ways depending on the settings and the specific project. This increases the possibility for a successful and sustainable project.

The process leader's role and the gender (diversity) expert's role
In collaborative research there is an ongoing discussion on whether the process leader should act as a facilitator or more strongly governing the process. See for example Aagaard Nielsen and Svensson, Eds (2006) and Phillips, Kristiansen, Vehviläinen and Gunnarsson (2012).

The role of the gender (diversity) expert also varies. If we want to achieve a real and sustainable change a gender competence, based on gender science, is crucial. This means that a substantial input of gender competence has to be intertwined with practical work, and in the exchange of experiences between the participants.

Phases in an interactive collaborative process – an ideal situation

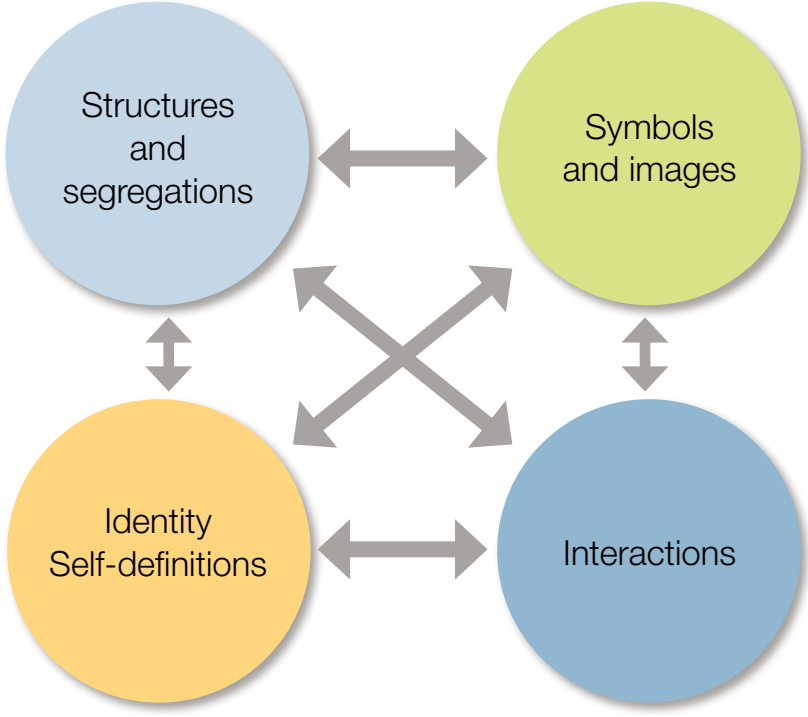
1. **What is the problem?**
2. **Legitiming, resources and time.**
3. **Creating a core of committed gender equality and diversity agents.**
4. **Organizing the joint and reflective process form.**
5. **Content learning from theory, practice and experiences.**
6. **Initiating change activities within the organization.**
7. **Ongoing evaluation and measurements points.**
8. **Dissemination of results within and outside the organization/company.**

Gender science as a theoretical base

The gender theory we use in the project is based on theoretical work within the 'doing gender' orientation. (Fenstermaker and West, 2002). Within this orientation we find different views; ethnomethodological, cultural, processual and performative (Korvajärvi, 1998). Common for all the streams is that doing gender is seen as an ongoing activity and interactive action between women and men, between women and women and between men and men. The doing gender perspective links the daily doing of gender and interacts with the institutional level, as well as making social power relations visible. The focus on action makes it well suited to combine with an interactive research theory and methodology.

Within the Nordic research field in gender and organisation the doing gender orientation has since the 1990s been developed and is today well established. In the theoretical/practical model in our case studies Acker's work on gendered organisations is incorporated (Acker, 1999) and tailored for our specific contexts.

Four sets of processes or points of entry to make gender inequalities visible:



This model is based on Acker's work on gender in organizations 1992 and 1999 and the developed model by Gunnarsson et al. (2007) is used in this handbook.

Acker (1999) defines the four processes as follows:

Structure and segregations
The first point of entry or set of processes consists of things people do to keep organizations going, including hiring, promotion, performance evaluation, allocation of work, setting salaries and wages, the actual work process, developing and enforcing rules about hours, breaks, workplace behaviour and time off, designing and introducing new technology, reorganizing or relocating work. As these ordinary activities are carried out, they result in organizational gender division, such as gendered hierarchy, gender segregation of jobs and positions, a gendered wage gap, and practices that separate the workplace from the rest of life along gender lines. Class, race and ethnic divisions may be created in the same process.

Symbols and images
The second point of entry is symbols and images. People in organizations create images, symbols, and forms of consciousness that justify, legitimate, and even glamorize the persistent gender divisions. They function ideologically to help to naturalize relations of power.

Interactions
The third point of entry is interactions. The work of organizing goes on through interactions between people, women and men, women and women, men and men, supervisors and subordinates, co-workers, and between employees and customers, clients, consultants or others from the outside. While doing the work of organizing, people are also “doing gender”. Gender is integral to many organizing practices and activities, rather than an external element that can be easily excised.

Identity, self-definitions

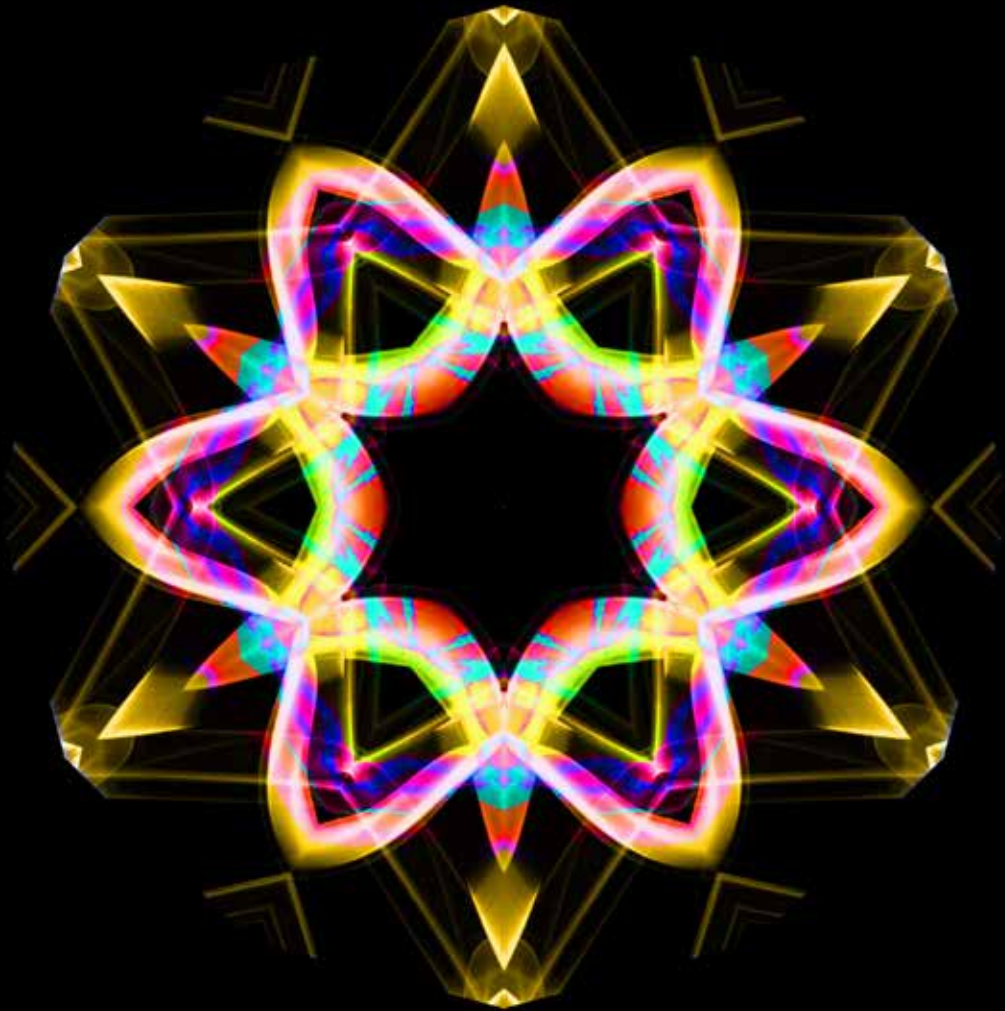
The fourth point of entry to understand gendered organizing processes is through the internal mental work of individuals as they come to understand the organization's gendered expectations and opportunities, including the appropriate gendered behaviours and attitudes.
Changes in processes and practices (individual and groups) are seen as asymmetric processes that continuously interact with each other resulting in contextual variations in gender orders. Changes can through different qualitative and quantitative measurements be related to the different sets of processes but do not necessarily emerge simultaneously.

Thurén (1996) suggests in a similar way that gender aspects can be analyzed in terms of force, scope and hierarchy. Force deals with the importance of gender. Is gender governed behaviour well defined? Are there sanctions for those who break the gendered patterns of behaviour? Scope deals with the number of areas that are affected by gendering, divisions of labour, life styles, interests, body dynamics etc. Hierarchy has to do with power and assessment of value. Is one gender more powerful or considered more valuable than another?

The theoretical work by Acker (1999) and Fenstermaker and West (2002) has served as a background as well as a point of departure for initiating joint learning processes, sharing experiences and activities. It has been a fruitful platform for our project activities although reality always exceeds models. It is therefore important to reflect upon what we encounter and reflect upon even if we cannot place it under some entrances in the model. Maybe specific entrances have to be highlighted for the ICT sector? For example how competence is defined? Some researchers also argue that corporality, body and sexuality should have been given an entrance of its own.

Diversity (intersectionality in more scientific language) i.e including the interplay with other powerful social relations is by no means a new discussion. A classical article is found in the anthology – Doing Difference by Fenstermaker and West (2002), where they develop an understanding of the intersection between gender, class and race.

The model presented in this chapter can also be used in the work with diversity.



HOW CAN WE **EXPLORE** AND **MEASURE CHANGE?**

Innovation and change are today “buzzwords” and seen as means of achieving a sustainable growth. What do we really mean by change and how to measure it? A distinction is often made between incremental change i.e. small steps of change, and a radical change. The latter is a concept used to emphasize a strong element of transformative change promoting competitive market advantages and solving the needs of new markets. Radical changes is often associated with new technical and/or economic solutions but the term is today also by many researchers including radical changes in work processes and new services (Andersson, Berglund, Gunnarsson and Sundin Eds, 2012). They are often contrasted to incremental innovations defined as small changes in work processes or already existing products. Using a gender perspective on innovation and innovative processes on policies, practices and procedures casts a new light on how we can promote the full potentials in innovation and innovative processes (Andersson, Berglund, Gunnarsson and Sundin, 2012). Today we are often asked to show results defined as radical changes but there are very different scientific traditions that argue that they have the best solutions.

How do we think about change?

Small changes in working life are often not even thought about as changes worth mentioning. An example from an earlier organizational change project will illustrate this. In this project the meetings with the change agents started with a round among the participants. The participants were asked if some changes have occurred in the organization since last time, a month ago. The participants started with saying no, not really. And then they were given time to reflect upon it and also include small changes. Then a lot of small changes were reported - changes that they originally did not think were important to notice. Another problem was that participants with lower status in the organization, often women, did not give voice to what they noticed because they are not seen or seeing themselves as knowledge agents.

A way of aligning the above example to innovation is the perspective that the group around Manzini is doing through organizing for what they call Creative communities: as a strategic view for innovation (Manzini et al., 2007). Manzini argues that:

"We need to introduce system changes in our lives, just like the radical innovations introduces on a small scale by the Creative Communities. To replicate and make them effective on a macro-scale, the first step is to build a new collective representation of reality where these solutions create new panorama of what could be "normal, possible and everyday..."

Creative and innovative theories on how change occurs and how we can study the emergence of change are still rare. In relation to the idea of incremental changes some researchers argue that a butterfly's flapping of wings can start a chain of changes that releases a hurricane. You can ask how and when this "tipping point" emerges (Gladwell, 2005) and when a chain of incremental changes becomes a radical change? There are still many questions to be answered. These questions have their roots in the eternal debate on the philosophical question – when is something old transformed to something radically new?

How we measured changes in our project?

The model presented earlier with four sets of processes or entrances to make visible organizational inequalities can also be used as a point of departure to measure change. The model allows for both quantitative and qualitative measurements in relation to the four sets of processes. We could for exemple count Swedes or Finns at the project start and at the end of the change process. This ensures a measure on bodily segregation and can be related to horizontal, vertical and working time segregation. Counting bodies is a type of measurement that is common and necessary to do to give us some basic information of an organization. We could then ask ourselves if this measurement ensure gender equality or diversity. To be able to answer this we need to add qualitative measurements such as do women and men carry out the same tasks?

Our first measurement point in the project processes is at the start of the project and the last measurement point is at the end of the project. To be able to understand what happens between these two measuring points we need to be aware and reflect upon when significant change of directions happens during the process, see the figure on page 37-38.

Personas to illustrate a change

In marketing and user-centered design personas are fictional characters created to represent the different user types. In this project the persona method was contextualized for the ICT sector and used as a tool to communicate gender and diversity issues based on interviews, focus groups, observations and statistics. The persona method was also used to address and critically reflect about gender and diversity in order to create awareness as well as to visualize change between the measuring point in the beginning and in the end of the project.

- During the project we could see a change in awareness about gender and diversity. The participants bring gender up much more than in the beginning of the project and they are not questioning why they have to work with these issues as they did in the beginning of the process.
- The personas were a way to communicate gender and diversity issues by fictive characters (putting gender and diversity glasses on). We could see that some participants still use the glasses and when they see gender and diversity issues they bring it up for discussion.
- The persona method illustrated gender differences and engaged participants to try to solve problems in the environment and be motivated to change.

The personas illustrated the structure and sex segregation in the ICT environment, the symbols and images of websites, the symbol of workers' within the ICT sector.

Persona **Lars** in the beginning of the project

This is Lars, a 41-year-old associate professor working with user-driven innovations within the area of Information technology at the University. Lars says innovation is about creating something new and he thinks commercialization of research is important since its benefits the society as a whole. He says;

"It is almost impossible for a single researcher or even a company to achieve innovations, but in collaboration with users and actors from industry you can reach a breakthrough"

Lars believes successful innovations are user-driven, in other words based on valuable insight about users' practical and emotional experiences. His research team of fourteen men and two women are trying to create new concepts, products and services for companies and organizations.

He knows from own experience that *"it can be easier to get funding if you know the users' needs"*. His research team has obtained a lot funding and been able to recruit many PhD students. Hence *"Innovations can contribute to regional development and job creation".*

Nowadays, it is a lot of focus on gender, equality and diversity as drivers of creativity and innovations. Thus involving more women might lead to more competitive products and it may contribute to new products and markets. He says;

"We talk about equalize male dominance within the ICT sector and we are trying to *involve more women, but we find it difficult to achieve equal numbers between men and women. We wonder if women want to work within*

the ICT sector, maybe women prioritize family and kids before career and the women's choices are the reason it is a male dominated area"

Lars says the organization has an ambition to work with gender and equality.

"We have done some efforts to promote gender equality, but these kind of efforts usually have a small budget and thus no priority. So we really need to find some quick fix to make the ICT sector more equal within a small budget".

Lars wants to be able to measure the effects of gender equality work. Now he has the opportunity to be a part of the development of a measurement tool. He is starting to get worried already, because the project is based on a lot of activities and time consuming.

"I was expecting the gender researchers to make some change happen, I mean they are the experts in this area. Instead they did focus on making us more aware of gender and tried to make us in charge of the changes. How do I make them understand I don't need gender theories or more knowledge? I know what I need to know I am married and have a daughter. I need quick results. I want to count women's and men's heads in the beginning and in the end of the project and I need to see results, can it be so hard!"

Persona **Lars** in the
end of the project

This is Lars, a 41-year-old associate professor working with user-driven innovations within the area of Information technology at the University. Lars says innovation is about creating something new and he thinks commercialization of research is important since it benefits the society as a whole. Lars believes successful innovations are user-driven, in other words based on valuable insight about users' practical and emotional experiences.

Nowadays it is a lot of focus on gender, equality and diversity as drivers of creativity and innovations. Thus involving more women might lead to more competitive products and it may contribute to new products and markets.

Lars works in a research team of fourteen men and two women, but he says; *"hopefully this will change in the future. We can´t see changes in numbers yet but we work actively to try change the gender imbalance within the ICT sector".*

His research team have obtained a lot funding and been able to recruit many PhD students, but only a few women. He knows from own experience that it can be easier to recruit women if you have a few in the organization. Lars tells us:

"During the project we have been working on gender awareness in the recruitment process, advertising, profiles. An equal steering group was one goal, but instead of filling in with a number of women we were thinking about positions and power as well".

Lars states;*"In this project we have learned gender equality in the ICT industry is not a quick fix. It requires long-term efforts to achieve this goal. A lot of activities have been going on within the project, one example was the gender and diversity application created within the project as a tool for project leaders to make sure they implement gender and diversity in their everyday work".*

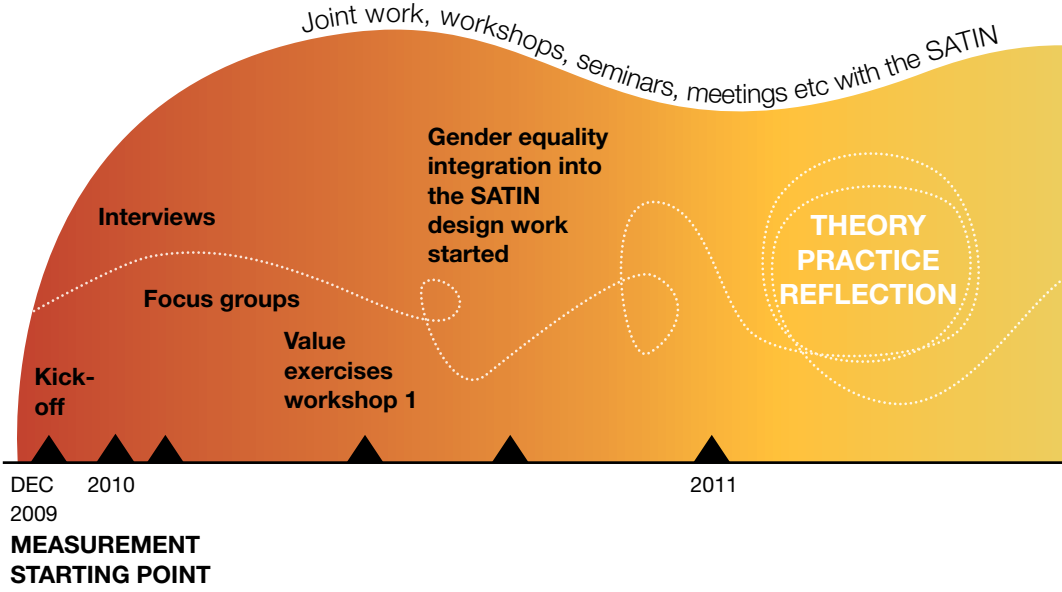
Within the project we did learn how to do our own gender observations in the ICT environment. We observed women's and men's positions, activities, power, wages and promotions in order to be aware of segregation of jobs and positions based on gender, age and ethnicity existing in our environment.

We observed websites, and computer magazines to understand how images and symbols were expressed in images. *"One example of one symbolic act identified was one IT company sponsoring a female basketball team".*

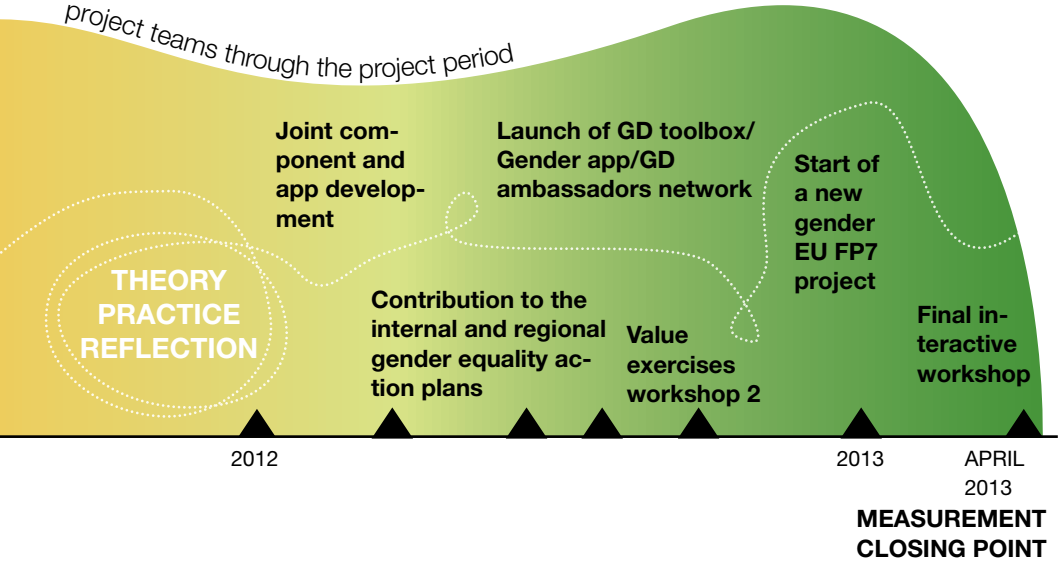
We also observed interactions in the team for example gender differences in speaking space, who are setting the topics at meetings, who decides in the group, who speaks most and who does not speak. *"We saw that women and people with other ethnicities can be excluded from networks and did not have the same influence within the group".*

Lars says; *"The gender researchers helped us put on the gender glasses. Today we realize the importance to be aware of gender and diversity when developing IT products aimed to reach a global market. It might help us reach different markets in the future".*

CHANGE PROCESS – SELECTIONS OF MEASUREMENT POINTS



During the process we encounter tailwinds and headwinds. These moments are by Berge and Ve (2000) named Moments of Equity (when increasing gender equality) and Moments of Normalization (resistance to change). This process of consensus and dissensus can be seen as driving forces in the process and a potential that contribute to a better platform for joint a nd more sustainable actions (Phillips et al, 2012). Ghaye and Gunnarsson (2009) describes these forces in terms of creative and critical thinking as a way to create innovative processes.


project teams through the project period
Joint component and app development
Launch of GD toolbox/ Gender app/GD ambassadors network
Start of a new gender EU FP7 project
THEORY
PRACTICE
REFLECTION
Contribution to the internal and regional gender equality action plans
Value exercises workshop 2
Final interactive workshop
2012
2013
APRIL 2013
MEASUREMENT CLOSING POINT

Process validation

How can we be sure that the process requirements for joint learning and sustainable processes are optimal?

- One significant characteristic is that the organization/company increasingly take ownership of the initiated change processes to ensure that they are continuing when the project ends.
- A joint learning process is ensured through different interactive methods with elements of learning and reflection, for example the method “concentric circles”. This method allows for a more in-depth joint reflective process.
- To ensure that all voices are heard at the meetings we can appoint a gender and diversity guard that observes what is happening in the workshops and the meetings. Who is talking, who is not talking and how long, whose input is seen as important? Watch out for the positions.
- We also need to use some kind of ongoing evaluation of the process and activities. You could end the workshops and meetings with an evaluation round together with the participants. Start the meetings with a reflective round asking what has happened since the last meeting?
- Using a workshop at the end of the project with the participants and outsiders to reflect upon achieved results, lessons learned, possible future work etc.

RICHARD JONSSON, AGIO AB:
We have integrated a gender perspective in our work environment management. The employees are actively involved. We take into account employees’ experiences of gender equality in salaries, parental leave, career paths, workplace culture etc. The project has also contributed to the establishment of the gender-balanced sponsor strategy at our company.

ANDERS LUNDKVIST, ARCTICGROUP AB:
Gender and diversity is importante both from a human and from a business perspective. Diversity is a good way to ensure many perspectives and in the long run get more profitable businesses. We have during the project increased our awareness and knowledge of gender and equality.

METHODS AND TOOLS

Diagrams

Diagrams were used at Ritaharju to describe work processes for familiarizing responsibilities and competences of different professions and individuals while sociograms were used to visualize social contacts and relations of the organization, to make hierarchies more visible etc.

Evolving meeting practices

“How are we doing” rounds in the beginning of meeting at Ritaharju for insuring space for everyone, but also enabling space for information delivery, news, concerns. Choreography of a meeting – exercise where one or two observers make notes of who is talking, for how long, was it constructive, destructive, happy, angry etc. How chair and group reacted etc. Help the team leader and the group to visualize and understand dynamics of the group and its evolving stage.

Forum play

The forum play is a method for achieving change. It is a kind of role play that involves the participants acting out important situations or current problems that ends in the middle of a conflict or difficulty. Forum plays are performed for participants, and the spectators are invited to enter the play and try out various solutions. The forum play is a method to get inspired by and it is

one way of sharing various ideas and creating new opportunities for actions in order to stop oppression. The method can be used as a tool to raise awareness of unacceptable conditions in order to motivate a change. In the Forum play procedure the participants are divided into small work groups for performing a small role play for a few minutes.

The action should be realistic and show an example of a dilemma or oppression. The play is performed for the rest of the group who are the spectators and they are given the chance to help the character who is in a dilemma. Someone takes the victim's role and shows how (s)he can affect the situation by behaving differently. When the group feels that they have finished, they switch to in-depth reflection. In work to reveal gender inequality and change to gender-aware workplaces, the forum play is a popular method. Revealing how gender is constructed in work groups, and what opportunities exist for breaking patterns, gives the participants inspiration and empowers them to behave differently.

Analyzing results of using forum play

- The forum play activates people at individual levels to try different ways/ strategies to handle for example harassments.
- The forum play prioritizes action, and some people learn by actually doing things, which means this method was a base for action learning.

Gender observations

You could use observations for process validation, but you could also ask the participants to observe the vertical and horizontal sex-segregation in the organization and then together reflect upon what you have noticed. Make charts and compare. Discuss why it is like this and reflect critically upon it together.

You could also do what we call participatory observations where you are more involved and share your own experiences with them while you observe.

House model work with children

The floor plan of the Ritaharju community centre was used. Kids draw their favorite places, places they don't like, where they have faced bullying, where they don't feel welcome etc. With adults you could add places which have most resources, activities, gendered activities etc. Exercise is used for improved and more equal furnishing, mapping unsafe environments, committing kids to planning and improving surroundings etc.

Observation exercises

Step-by-step exercises for Ritaharju staff we carried out to make observations of interactions and facilities of their surroundings, and eventually of their own actions. Focus was on color schemes of clothes and facilities etc. On interaction practices: how are you talking with kids (or to kids), how are you talking with adults, what if you change the gender or profession, what happens. On study materials: who is represented and doing what etc.

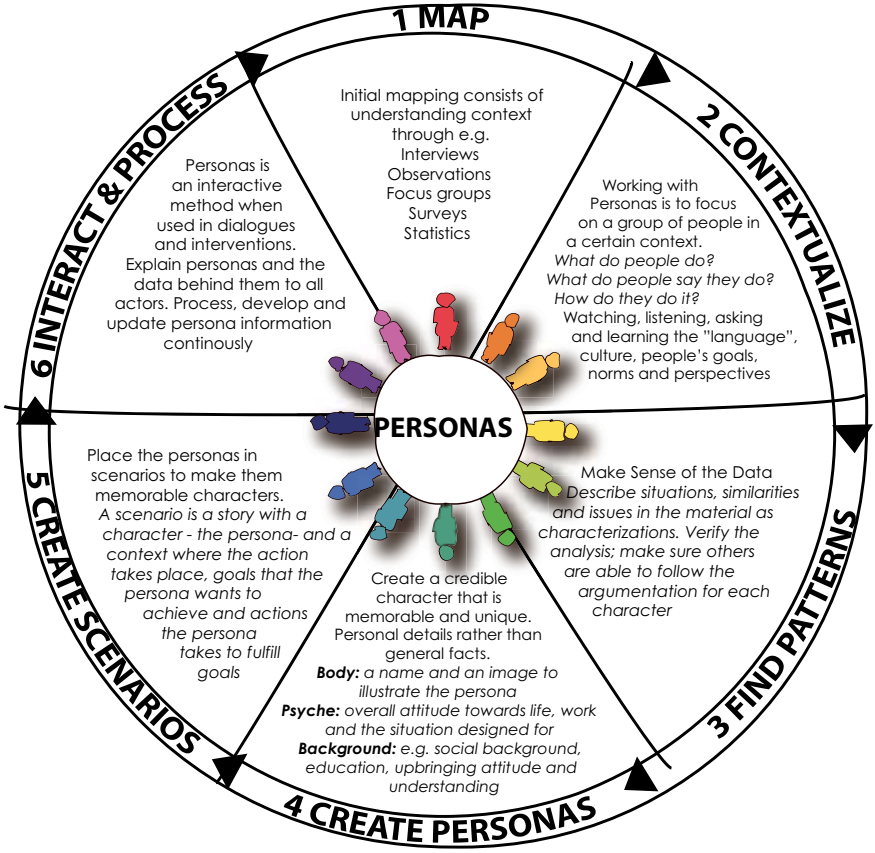
Personas

The Persona method is a frequently used design method in development processes to focus on users' preferences and needs (Cooper, 1999). We have developed the Persona method to address gender and equality issues (Källhammer & Wikberg Nilsson, 2012).

In the SATIN pilot we used the Persona method to address and critically reflect about gender and diversity in order to create gender awareness in the ICT context. The Persona process involves a mapping part. Based on interviews, observations, focus groups and workshop activities we tried to understand the ICT context, searched to find patterns to make sense of the data.

Thereafter we developed personas, fictional descriptions of people. The personas are formed, consisting of a body; a fictive name and an image to illustrate the character, a psyche; such as an overall attitude towards life, work and the situation designed for, a background; e.g. social background, education, upbringing which influence abilities, attitudes and understanding of the world, and finally personal traits which brings the Persona to life and makes it an engaging character rather than a flat stereotype (Nielsen, 2004).

The fictional details in a persona are included in order to increase communication and commitment to the character. We placed the persona in a scenario to make 'her' valuable. In this context a scenario is a story, with a character (the persona), a context where the action takes place, goals that the persona wants to achieve and actions that the persona takes to fulfil those goals. We have used the personas and scenarios at workshops as a tool for discussing and challenging unequal gender orders.



The process of making a Persona, a model inspired by work of e.g. Cooper, 1999; Grudin & Pruitt, 2002; 2003; Pruitt & Adlin, 2006; Nielsen, 2004; 2007.

Illustration Åsa Wikberg Nilsson

We have developed the Persona method and based it on gender theories, the doing of gender within organizations, with inspirations of Ackers model illustrating four gender processes; structures, symbols, interactions and individual identity (Acker, 1992, 1999). We used these four processes in our theoretical platform to map and contextualize, as a starting point for our persona development and as a framework for our participants to reflect on their own understandings of gender and to illustrate change.

Analyzing results of using personas

- In this project we contextualized the Persona method for the ICT sector and used the Persona method as a tool to communicate gender and diversity issues, based on interviews, focus groups, observations and statistics.
- In the SATIN pilot the Persona method was used as a tool to address and critically reflect on gender and diversity in order to create gender awareness.
- Switching gender, ethnicity and age of persona was a good exercise and helped the participants see gender differences. During the project we could see a change in awareness about gender and diversity, the participants bring gender up much more than in the beginning of the project and they were not questioning why they had to work with these issues.
- The personas is a way to communicate gender diversity issues by fictive characters (put gender and diversity glasses on), we can see that some participants still use the glasses and when they see gender and diversity issues they bring it up for discussion.
- The method illustrated gender differences and engaged participants to try to solve problems in the environment and motivated to change
- The method communicates gender theory to the participants in a way that is easy to understand.
- The personas illustrated the structure and sex segregation in the ITC environment, the symbols and images of websites, the symbol of workers' within the ICT sector.

Quotation method

A very easy and thoughtful method to highlight conceptions and prejudices is to let the participants look for some quotations or some text about competence, for example in some ICT advertisement. It is best if there is a picture of the ideal man for the job. Ask someone in the group to read it loud for the group. Make a second round when you change the picture to a woman and a she in the text. Then read it loud again. Do the same in a third round with a woman with another ethnicity than Swedish, listen and reflect upon what happens. You could also change age, and sexuality. It is very important that you choose someone in the group to read loud.

RIMA – conflict resolving model

RIMA is a process model for equal interaction and how to interfere and resolve conflicts that occur in interaction situations.

Value exercises

We have used value exercises in this project to clarify and create discussion about gender and diversity issues. Value exercises were used in the beginning of the project to visualize values about gender and diversity and we used the method to measure the participants starting point. The value exercises did open the participant's eyes for gender and diversity issues and the method was used as a way of stimulating change within the group. The purpose of using the method was to reflect on and discuss values of work, in order to raise the participants' gender awareness and to motivate change.

One example of value exercises used in the SATIN pilot is the "hot chair", an exercise where chairs are put in a circle, one chair for each participant and one extra chair. In the exercise the participants should react individually to different statements the group leader read out loud. If they agree with the statement, they stay at their chair, if they don't agree they stand up and change seats. After every statement, some of the participants were asked to explain why they decided to change seats or why they decided not to. The hot chair helps the participants to discuss values.

The "four corners" is an exercise in which participants must take a stand on four statements that are placed in different corners of the room. The process leader asks a question and the participants express their attitude by going to one of the four corners depending on what statement they chose. The participants then have to present the reasons why they chose as they did, and finally they have a chance to change to another corner, i.e. to change their opinion.

Analyzing results if using value exercise

- The first time we had value exercises in this project the method did raise resistance among some of the participants, while the resistance was gone the second time we had value exercises.
- In the beginning a few of the participants had biological explanations to gender differences, later on they saw gender as something constructed, but used biological explanations once in a while.
- The first time we had value exercises participants said they had the knowledge they needed about gender, but the second time we had value exercises the participants knew they did lack knowledge about gender and diversity and they wanted to know more.
- The method helps the participants put the gender glassed on and we could see they were more aware of gender and diversity at the end of the project, but they were still unsure how to implement gender and diversity on a daily basis and wanted tools for this.

Tools for gender and diversity developed in the pilots

Gender and diversity toolbox

The gender equality and diversity work in the SATIN pilot was one of the tools to attract a broader group of people to develop apps and mobile services. SATIN established a gender equality and diversity team to collect and develop methods and processes together with project members. The aim of this work was to create a more gender-aware project management and working environment based on gender science. The focus was on the organization of the work, the roles and responsibilities of the project members and management. Many discussions were about how gender equality and diversity could promote the project work and results. Regarding diversity SATIN had a focus on age, gender and ethnicity. The tools and methods to mainstream gender into the SATIN project activities were collected and the gender and diversity toolbox was jointly developed.

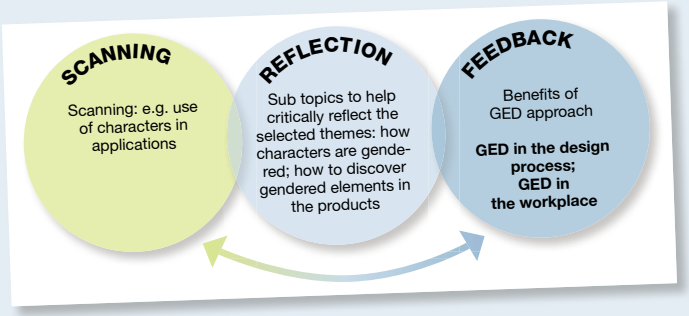
The toolbox is now available on www.gdtoolbox.eu.

Gender app

Another result of the gender equality and diversity work in the SATIN pilot is the gender app. The goal of SATIN is to empower people without previous programming skills to create apps. To mainstream gender into project work resulted in a joint development of a checklist component which is a core part of the gender app. The gender app is a tool to integrate the gender equality and diversity in the project work from start to finish. www.gdtoolbox.eu

GED Scanner

Gender equality and diversity scanner (GED scanner) is a tool for web designers and product developers to avoid transferring cultural limitations, stereotypes and biases in development processes and final products. Case studies and excercises cover figures and chareacters, language and symbols, users and designers.



Scanner is a part of OulLab – Living Lab service palette, address: http://ged-scanning.com/GED. The tool is in Finnish.

PILOT DESCRIPTIONS

OTA
KUVA

Ritaharju pilot

There are 900 children and youth between the ages of 0-18 years in RCC. The number of staff is 120, in 15 different professions. RCC is located in new suburb area of Oulu City, which is still very much under construction. It opened for business in autumn 2010.

Introduction

Ritaharju Community Centre (RCC) is a new model for organizing municipality services such as day care centre, comprehensive school, regional youth services, regional library services and also nutrition and health care services for daily users of the centre. Goals for RCC were outlined in founding paper of planning committee: Action plan for collaboration published 2009. Actual operational model for RCC was still under development.

The new model was seeking synergy of different municipal administrations, flexible use of staff and resources, effective use of facilities. Modern architecture and structural solutions such as flexibility and spatiality supported reaching the goal. New pedagogical thinking was a part of ambition. ICT was used daily for educational purposes. Structure of a day was scheduled in a way which supported collaborative planning and working of professionals from different municipal administrations. Staff and children were based on cells instead of classes. Each cell had multiple numbers of groups and classes which could be divided differently during the day. Each cell had a team head, which acted as coordinator and was part of the management group of RCC.

Developing a new organisational and operational model with staff of Ritaharju Community Centre was one of the pilots of this project. The model aimed to enforce collaboration of staff, include gender equality and diversity awareness into all structures as well as working culture of RCC. Management model and competences were also under development. The majority of the work has been done with the management group of RCC.

Selected actions – process description

Development work included actions such as analysis, mappings, observations, surveys, interviews, training, coaching and workshops carried out during the years 2011-2013. Below are some examples.

1 *Analysis of the founding documents of RCC*
Aim to map of strategy, goals, indicators as well as planned operational model of RCC. Results of analysis were used in finalizing development plan.

2 *Lectures for the staff*
Introducing themes and challenges of development work ahead. Issues of developing a workplace and work practices: concept of equality and diversity, principles and criteria of equal and diverse workplace, equality in educational settings, legislation, interaction and hierarchies, model for solving conflicts.

3 *Interviews of team heads and team members*
Mapping support needed for team leadership, challenges and goals faced in teams. Familiarization with composition of the team, its work patterns and processes. Results of interviews were used in finalizing more detailed training and workshop materials for teams.

4 *Development work and training in teams*
Create and support collaborative working patterns by training, workshops and exercises.

5 *Surveys*

Several questionnaires etc. for members of staff from topics of 1) management, 2) working culture, 3) work processes and practices. SWOT analyses for members of the management group.

Results of surveys were used as background material in workshops of the management group and teams, to further development of operational and management model, improving processes as well as formulating a basic structure of Action plan of teams.

6 *Workshops with the management group*

The management group worked intensively with the new operational model, the management model, processes and structures, division of responsibilities etc. The work was supported by lectures and exercises of leadership traditions, management skills, understanding of systems and evolution of organization and groups, strategic planning as well as more targeted competences such as time management. Extra support was coaching for managers: individual meeting, 1,5 hours every 3 weeks, of the issues connected to working as manager.

7 *Action plans*

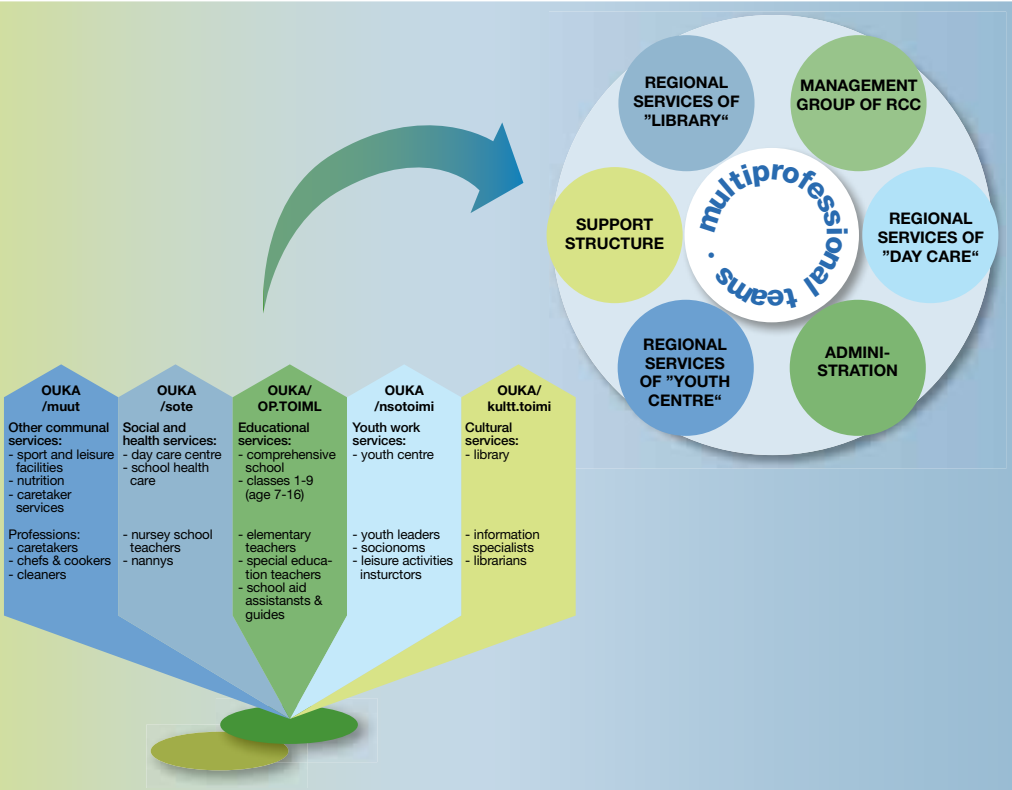
New team models which were created and tested during years 2011-2012 were described in the Action plan, in which each team outlined the composition of the team, its work patterns and processes as well as goals for period autumn 2012 to spring 2013.

8 *Strategy for the future*

The management group gathered processes, structures and principles of the operational model of RCC as well as strategic goals for coming years in Action plan for collaboration – RCC strategy for years 2012-2015.

Main challenges were to produce a shift of thinking, working patterns and organizational structures.

Operational focus shifted from traditional municipal administration system, which was strongly sectorial, into multi-professional team model.



Multi-professional teams
Professionals of different municipal administrations are now members of *multi-professional teams*. The team has responsibility to organize a whole day – from 8 am to 8 pm (if necessary) – for the children/the youth of the cell. There are 100 to 250 children/youth in each cell and each cell has approximately 20 professionals working collaboratively in multi-professional teams.

Multi-professional teams are now in charge of daily management, developing practices and pedagogical solutions, working multi-professionally, working equally and collaboratively, developing competences of the staff and also time management.

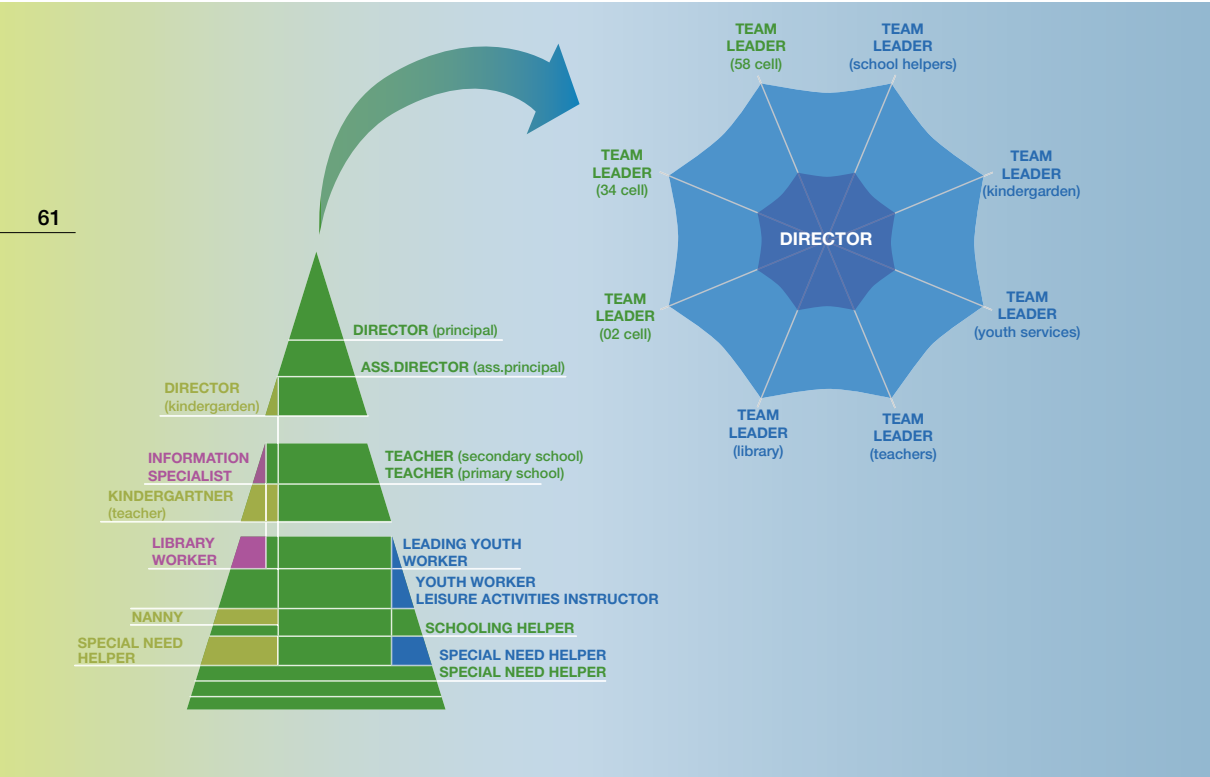
Management group of RCC
In the new division of responsibilities the management group is in charge of strategic planning (short and long term), development of RCC from holistic perspective, development of management system and practices, setting targets, updating vision and mission and creating follow-up system.

Support structure
Support structure is a collection of different services necessary for daily operations such as nutrition and health care services for daily users of the centre, maintenance etc. Parts of the support structure are also professional teams, which are in charge of professional development and support as well as development of work processes.

Regional services
Library and youth centre provide services also for other residents of the Ritaharju suburb.

Shift in *management model* from high hierarchy pyramid, which include sectored administration system to flat umbrella based on multi-professional teams.

In a pyramid model personnel was divided and managed by a municipal administration. Typically managers were not involved in daily work. The new model introduced a new stage of management: team leaders, former team



heads, who are managing multi-professional teams. Also professional teams (school helpers, kindergarden, youth service, teachers, library), which are part of support structure has own team leaders. Multi-professional team leaders' middle manager status were supported and enforced with structural changes and redefined division of responsibilities (look above). The new model was flatter in terms of hierarchy. Operational managers were now strongly involved in daily work. This improved dramatically many processes of the organisation. E.g. information travelled more effectively between grassroot employees and management, because every team leader was a member of the management group. The management group also improved its internal practices by implementing new practices such as "How are we doing" rounds as mechanism for status reporting and self-observation techniques for improving equal working practices for the management team, improving structures of memos etc.

Meeting the challenges

The challenges outlined in the beginning were shift of thinking, working patterns and organizational structures. There is unquestionable evidence through surveys and interviews that organizational structures have changed. Change in structures also supported change in working patterns and these both challenge traditional ways of thinking. The majority of the staff has long working history in traditional work environments, so change requires time, new information, support from managers and organisation that changing process is possible. Surveys confirmed this conclusion.

Even gender equality and diversity (GED) awareness has increased, although slowly and not without resistance. Although RCC is strongly female dominated organisation, typically the few men have very strong positions. GED competence is still under development, but recently established GED group has started to develop GED action plan and training for RCC.

What's app?
Mobile apps by the users
Simply drag and drop!
satinproject.se
SATIN

Google
TAILORED

SATIN pilot

Introduction

The aim of the three-year project SATIN is to enable end-users without prior programming skills to create their own apps. The project with a total investment of 3.2 million euros is funded by the EU structural funds, the County Administrative Board of Norrbotten, the Norrbotten County Council and the City of Luleå and will be concluded in 2013.

Tools, business models and new architecture for mobile service creation are the objectives of SATIN. To increase the share of women engaged in the region's ICT industry is also addressed due to the expectations of the funding agencies as well as the project owner's ambitions to attract more women to the ICT sector. The project has focus on three areas: technical platform, user participation and business opportunities. The project work is carried out by Luleå University of Technology and Umeå University together with local ICT companies.

SATIN's ambition is to strengthen the ICT industry and research in northern Sweden in the area of user-developed mobile services. The business opportunities in new or existing companies are estimated to create around 30 new jobs. SATIN has by now contributed to knowledge building at universities, companies and public agencies and two spin-off companies. The aim of the gender equality and diversity work in SATIN was to attract a broader group of people to develop apps and mobile services. Diversity in the project was defined as age, gender and ethnicity.

The gender equality and diversity work started in the project application phase. The SATIN project owner and the SATIN project manager/coordinator supported from the start of the project gender mainstreaming as one of

the tools to improve the results of the project. Resources were allocated for the work and the gender equality and diversity team leader was appointed to lead the task.

Gender imbalance

The SATIN team with 25 project members is a collaboration between several research disciplines at two universities and local IT companies. A third of the project team members are women. The gender imbalance of the sub-teams (technology, design and business teams) has been high through the whole project period. The technology team has only men, the design team is mixed and the business team has mostly men as team members.

One of the teams which was established after the project start was the steering committee. The steering committee was decided to be gender-balanced with diverse skills, a goal they also achieved. The gender equality and diversity team as well. The gender equality and diversity team was later extended to a network of ambassadors with members from universities, organizations and companies who are either professionals in the ICT sector or interested to increase the gender equality and diversity in technology and ICT.

Positions

The men and women in the SATIN project have different positions. The project owner and the chairman of the steering committee are men. The project manager/coordinator is a man and the equality and diversity team leader is a woman. Business, design and technology teams have all men as team leaders. The gender researchers participating or contributing to the project are almost all women. The evaluators are two (one woman and one man) and the evaluation of the gender equality work has mainly been done by a woman.

The gender equality and diversity team leader is a member of the management team as well as the rest of the team leaders, the project coordinator and the project owner. The management team has had bi-weekly telephone conferences through the whole project period. The management team have participated and contributed together with the project members to the two-day project workshops four times per year. Additional gender equality and diversity workshops and seminars have frequently been offered to the project members in order to increase the gender-awareness of the project management and members as well as to promote inclusion and creativity. The gender equality team leader being present, collaborating and contributing to the project work has been prioritized. The collaboration with gender experts has ensured that the work carried out is based on gender science.

How to make the ICT sector as attractive for women as men?
The ICT sector lacking women and being sex-segregated as well as the recruitment policies and routines of the universities and ICT companies were discussed a lot in the meetings, workshops and seminars. Why isn't the ICT sector as attractive for women as men? Can we improve the recruitment process of the universities and ICT companies? How do we describe our workplace? What networks do we use for recruitment? Which recruitment criteria do we have and how do we define competence? How do we find skills? How can we broaden our perspective? Both users of the ICT and ICT sector will lose when we exclude women.

Results

The interviews, focus groups and observations carried out by the gender experts and process leaders state that the gender awareness of the SATIN project management and members was increased during the process. This is also stated in the reports of the project evaluators. A selection of methods and tools and results of mainstreaming gender in the SATIN pilot:

1. Gender and Diversity Working Model

The focus of the gender equality and diversity work was on the organization of the project work, the roles and responsibilities of the project members and management. The working model was designed with gender researchers in a previous ICT project and further developed in SATIN. The gender and diversity team leader being present and contributing to SATIN project activities was prioritized. The gender equality and diversity activities were based on gender science and needs of SATIN.

2. Gender and Diversity Team

SATIN established a gender equality and diversity team to collect and develop methods and processes together with project members in order to create a more gender-aware project management and working environment. The work was coordinated by a team leader with skills in gender mainstreaming. The team leader was also a member the SATIN management team and had contributed to the work description of the SATIN project in the application phase. A gender researcher was appointed as a member of the team to ensure that the work would be based on gender science.

3. Design Team
A good example of how gender mainstreaming supported the SATIN project work was the activities carried out by the design team. A major breakthrough was when the design team was extended with a team member with skills in computer science and gender equality. Information about the design aspects of end-user programming were collected and analyzed and embedded in the design of the SATIN platform. The goal was to design in a way that support self-efficacy and reflection, and thus promote a broader group of people to develop apps. The gender equality and diversity aspects were also considered in the actual design regarding terminology as well as features that support both male and female strategies when they use the SATIN platform. Phases where these aspects were also considered were when recruiting test pilots, when communicating with them, in the examples and environments tested and realities referred to. It is quite common that the gender equality work is considered as unnecessary costs in the development of ICT products and services. But it can also pave the way for a broader customer base, and thus greater profits.

4. Gender App
Another breakthrough regarding gender mainstreaming was the joint development work with the technology team and the gender equality and diversity team leader. The result of this cooperation is a checklist component which was used to create a gender app. The gender app is a tool to integrate the gender and diversity perspective into a project description, project management and a daily project work. The gender app is also useful when testing how a project meets the quality standards in terms of inclusion and diversity.

5. Gender and Diversity Toolbox
The gender equality and diversity toolbox was one of the results of the project and designed with the project members, management and the gender equality and diversity team. Workshops and seminars were facilitated by the gender researchers and consultants with aim to enhance the gender-awareness of the project management and members. A part of the work was to define and describe criteria for an inclusive project working environment. The tools and methods for gender mainstreaming in practice are now available on www.gdtoolbox.eu.

6. Gender & Diversity Ambassadors
During the project the gender equality and diversity team was extended to the network of ambassadors with twenty members from both academia and industry. The ambassadors are strategically important for a sustainable gender equality and diversity work. The ambassadors' tasks included the improvement of the project work as well as the dissemination and promotion of the results of the gender equality work in their workplaces and networks during the project and after the project has concluded.

Breakthroughs/Milestones in the process
- A team member with skills in computer science and gender equality selected to the design team.
- The SATIN management team made a decision to support the development of the gender app.
- The collaboration between the technology team and gender equality team when developing a new SATIN component.

Challenges

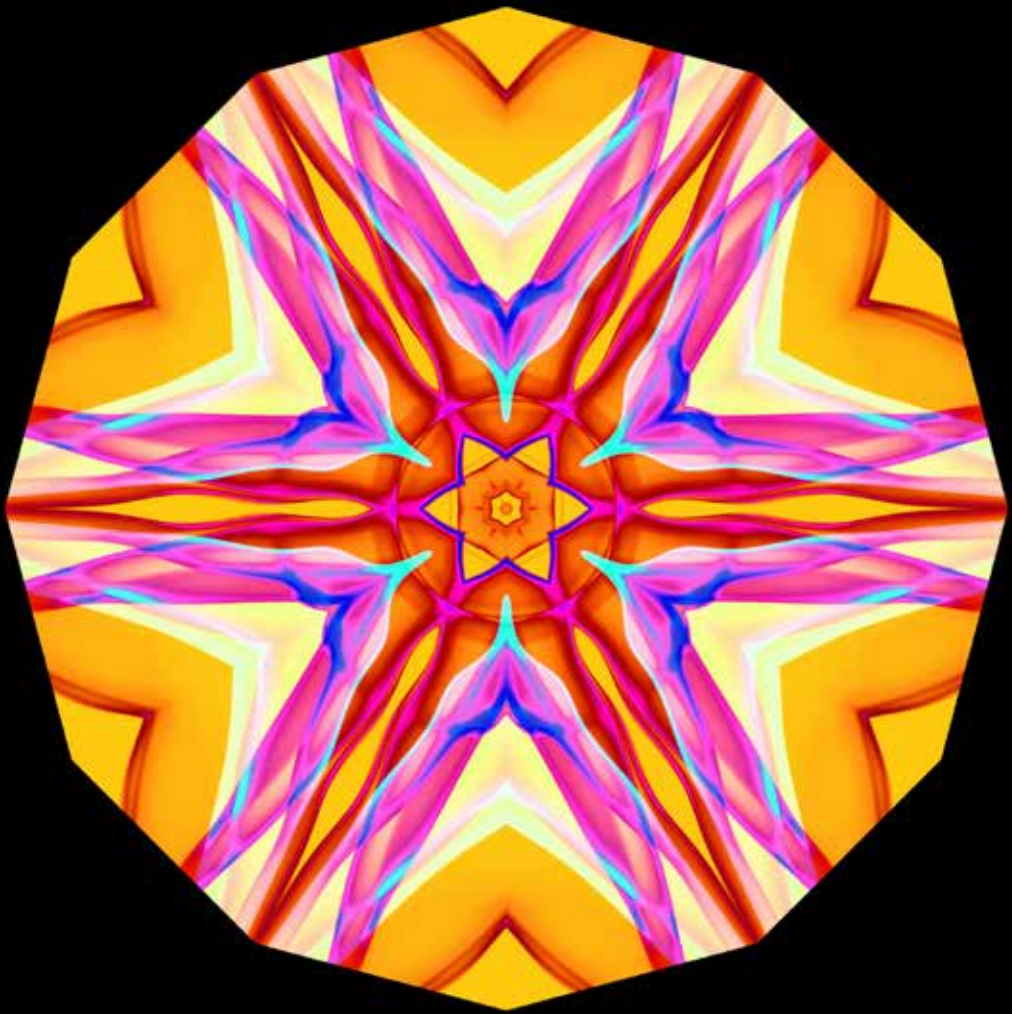
A lot of questions and issues were raised and discussed during the SATIN project. How can gender equality and diversity make the ICT sector more attractive for both men and women? How can we expand women's influence on ICT development? How can gender equality and diversity support the business development? How can we create more attractive and competitive ICT innovations? We agreed that we don't want to produce more of the same – we need to be innovative. Gender equality and diversity as drivers of creativity and innovation was discussed as well as everybody's right to form his/her future regarding the development of ICT.

End-user involvement in the development of the SATIN platform raised many questions:

- How do we attract a broader group of people to develop apps?
- How do we address both men's and women's realities?
- How do we design for inclusion?
- How do we avoid preserving stereotypes?
- How do we recruit and select people to the user workshops?

The challenges of the recruitment processes raised also questions:

- Why isn't ICT industry as attractive for women as men?
- Which role models do we show up?
- How do we communicate to include and not exclude?
- How do we describe our workplace in recruitment ads?
- How do we define competence?
- What networks do we use for recruitment purposes?



WANT TO TAKE THE NEXT STEP?

Recommendations from the Mäta Jämt team

Working with Mäta Jämt has been an inspiring journey and we are already seeing results. We chose a working model to promote a more sustainable change. Our goal has been that all participants collaborate on equal terms in joint learning and knowledge sharing processes. In the ideal situation of interactive collaboration all participants are seen as experts in their own fields. This is to ensure that the gender equality and diversity work continues when the project is over and the process leaders and researchers have left.

Recommendations for mainstreaming gender

- Engage both women and men with diverse skills in the teams
- Communicate to include, do not exclude people
- Before decisions are taken consider the effects on women and men
- Challenge stereotypes about men and women
- Promote reflection
- Enhance quality through ongoing evaluation
- Have fun

Working model for mainstreaming gender

- From saying to doing
- Increase gender-awareness through knowledge and learning
- Change through training and reflection
- Joint development and implementation of tools and methods
- Integrate gender-training into core activities of the project
- Team work based on gender science

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